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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/767,563	01/23/2001	Young-il Lim	A33875	2450

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BAKER & BOTTS  
30 ROCKEFELLER PLAZA  
NEW YORK, NY 10112

EXAMINER

MEHRPOUR, NAGHMEH

ART UNIT	PAPER NUMBER
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2686

DATE MAILED: 08/11/2003

4

Please find below and/or attached an Office communication concerning this application or proceeding.

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# Office Action Summary

Application No.  
09/767,563

Applicant(s)  
Young et al.

Examiner  
Naghmeh Mehrpour

Art Unit  
2686

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some\* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 3 6) ☐ Other:

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**Priority**

1. Receipt is acknowledged of papers submitted under 35 U.S. C. 119(a)-(d), which papers have been placed of record in the file.

**Information Disclosure Statement**

2. The information disclosure statement filed reference listed in the information Disclosure submitted on 04/24/01 have been considered by the examiner (see attached PTO-1449).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claims 1-2, 4**, are rejected under 35 U.S.C. 103(a) as being unpatentable over Choi et al. (US Patent Number 6,405,045).

Regarding **claim 1**, Choi teaches a method for controlling an overload of a digital mobile communication system (see figure 1) having a base transceiver station (BTS) and a base station controller (BSC), wherein each of the base transceiver station and the base station controller has a database (Col 1 lines 30-50, col 2 lines 26-34), the method comprising the step of:

- a) initializing threshold values stored on the database as predetermined values (see figure 1, col 3 lines 22-37, lines 40-43, lines 54-58, col 4 lines 12-15).

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b) monitoring each of utility rates of a control processor resource (col 4 lines 16-21) and a call resource (col 3 lines 44-51, lines 59-66, col 5 lines 59-61),

c) comparing the utility rates of the control processor resource and the call resource with the threshold values respectively, thereby obtaining overload of the control processor resource and the call resource (col 4 lines 15-21),

d) comparing over load of the control processor resource with the overload of the call resource, thereby selecting one of the control processor resource and the call resource as a resource to be controlled, which has a higher overload grade (col 4 lines 15-21, <sup>lines</sup> ~~col~~ 22-52),

e) determining whether an overload occurs in the resource to be controlled (col 4 lines 22-28).

f) if the overload occurs in the resource to be controlled, informing a base station manager of an occurrence in the resource to be controlled (col 4 lines 53-57).

Choi teaches that comparing between the calls sources and control sources loads are based on the utility rate (col 4 lines 15-19). Choi teaches that the comparison and detection based on predetermined threshold level (col 4 lines 19-21). Choi does not specifically mention that system measure the overload grade. However It is well known in the art that overload grade is obtained by comparing the utility rate with the overload threshold value as applicant mentioned on specification page 5 lines 10-11. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine above teaching with Choi system, in order to

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provide a dynamic overload control device and overload of the resource use rate and processor overload in BTS and BSC of a CDMA system.

Regarding **claim 2**, Choi teaches a method further comprising the step of: changing the overload threshold values according to a control signal from the base station manager (col 4 lines 53-57).

Regarding **claim 4**, Choi teaches a method as wherein, at step f) an overload utility rate of a previous period and information about the overload of the current overload grade are transmitted to the base station manager along with the occurrence of the overload (col 4 lines 16-52). Choi fails to specifically mention that the method calculate an overload grade. system measure the load grade. Since overload grade is obtained by comparing the utility rate with the overload threshold value. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine above teaching with Choi system, in order to provide a dynamic overload control device and overload of the resource use rate and processor overload in BTS and BSC of a CDMA system.

5. **Claim 3**, is rejected under 35 U.S.C. 103(a) as being unpatentable over choi et al. (US Patent Number 6,405,045) in view of Park et al. (US Patent Number 5,835,490).

Regarding **claim 3**, Choi fails to teach a method wherein the overload a major grade includes a normal grade, a minor grade, a major grade and a critical grade. However Park teaches that the threshold value can be set to the normal, minimum, maximum, critical levels (col 4 lines 52-55, col 6 lines 15-20). Since both Park and Choi both teach method of controlling overload in the same type of environment. Therefore, it would have been obvious to one of ordinary skill in the

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art at the time of the invention to combine Park teaching with Choi system, in order to improve load balance of user efficiently, and maximizes the use of system resources.

### **Conclusion**

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

**Yoo et al.** (US Patent 5, 574,770) disclose method for controlling overload of main processor of distributed switching system with hierarchy structure

**Cyr et al.** (US Patent 4,974,256) disclose load balancing and overload control in a distributed processing telecommunications system

**Rathunde** (US Patent Number 6,574,477 B1) disclose dynamic load balancing during message processing in a wireless communication service network

**Achour** (US Patent number 2002/0137518 A1) disclose system and method for minimizing hardware communications system

7. **Any responses to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

**or faxed to:**

(703) 872-9314, (for formal communications intended for entry)

**Or:**

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(703) 308-6306, (for informal or draft communications, please label  
"PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal  
Drive, Arlington, Va., sixth Floor (Receptionist).

Any inquiry concerning this communication or earlier communication from the examiner  
should be directed to Melody Mehrpour whose telephone number is (703) 308-7159. The  
examiner can normally be reached on Monday through Thursday (first week of bi-week) and  
Monday through Friday (second week of bi-week) from 6:30 a.m. to 5:00 p.m.

NM

July 31, 2003



**NGUYENT.VO  
PRIMARY EXAMINER**